Name:

*Mr. Tiénou-Gustafson, Mr. Bielmeier*

Geometry, Period

Due Date: Tue, 30 Sep 2014

**Geometry**

**Homework**



**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| 1. Find the coordinates of the midpoint of the segment with the given endpoints.  a. R(3, 1) and S(3, 7)  b. V(2, 4) and W(6, 6) | 2. The endpoints of QR are *Q*(–5, 1) and *R*(6, 5).  a. Graph the coordinates.    b. Find the coordinates of the midpoint *M*. |
| 3. Find the midpoint of the segment *QP*. | 4. Points *W*, *X*, *Y*, and *Z* are collinear. *WZ* = 40, *XZ* = 18, and *Y* is the midpoint of *XZ.* What is the length of *XY*?  W X Y Z |
| 5. Find the indicated length.    a. DE  b. AB  c. AC  d. BD  e. CE  f. BE | 6. On a number line, point Q is located at 10, point R is located at -5, and point S is located at -13.   1. Draw a number line.      1. Find the length of QS. 2. Find the length of RS. 3. How much longer is Segment QS than RS? |

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| 7. What is a real- life example of when we would need to find the midpoint of two things? Please do not use any examples given in class. | 8. Now that you know how to find the midpoint from two endpoints, tweak your understanding of the formula to uncover a way to divide a line segment into three equal parts. What would the formula look like? |
| 9. What is the slope of  if C(5, - 4) and  D( 5, 2)?  *Is this a line or a line segment?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* | 10.  The graph shows the number of new Broadway show productions for certain years. Find the rate of change between:   1. 1995 to 1996      1. 1998 to 1999 2. Which year had the greatest rate of change? How do you know? |
| 11. What is the value of *x*? | 12. *Error Analysis*:  Teresa encountered this problem:  “Find the midpoint if the coordinates of the endpoints are (-4, -10) and (6, 7)”  She proceeded by adding -4 and -10 and dividing by two for the x- coordinate and adding 6 and 7 and dividing by two for the y- coordinate.  Her final answer was a (-7, 6.5). Given that Lucy’s response was incorrect, explain the error in her reasoning |